

CLAIMS

1. A method for performing a lawful interception in a packet network, comprising the steps of:

5 generating (S2) interception related information packets from a communication or network activity to be intercepted;

generating (S2) communication content packets from said communication or network activity to be intercepted;

10 providing (S3) identification data for said interception related information packets and for said communication content packets of one group of communication packets;

providing (S5) ordering data for each of said
15 interception related information data packets and/or for each of said communication content packets; and

transmitting (S6) said interception related information packets, said communication packets, said identification data and said ordering data to an
20 interception authority device (1).

2. The method according to claim 1, further comprising the steps of

using (S11, S12) said identification data for
25 identifying interception related information packets and for said communication content packets of said one group of communication packets; and

using (S13) said ordering data for ordering said interception related information packets and said
30 communication content packets.

3. The method according to claim 1, wherein said identification data is a session identification data.

4. The method according to claim 3, wherein said packet network is a GPRS network and said session identification is data is obtained from a PDP context in GPRS.
- 5 5. The method according to claim 1, wherein said ordering data are integer numbers which are incremented for each sequential packet.
6. The method according to claim 1, further comprising
10 the step of providing (S4) a time stamp to each interception related information packet and/or to each communication content packet.
7. The method according to claim 1, further comprising
15 the step of
 providing (S2) a frame for each interception related information packet and each communication content packet, in which said identification data and said ordering data is included.
20
8. The method according to claim 7, further comprising the steps of
 providing a time stamp (S7) to each interception related information packet and/or to each communication
25 content packet; and
 arranging said time stamp in said frame.
9. The method according to claim 1, wherein said ordering data are such that an overflow thereof is
30 possible, and
 said method further comprises the step of
 providing a packet group indication to each interception related information packet and/or to each communication content packet for distinguishing between

the group of packets before said overflow and the group of packets after said overflow.

10. An interception system for packet networks,
5 comprising

at least one first network element (3) for intercepting a communication; and

at least one interception authority device (1);
wherein said first network element (3) comprises

10 a first packet generating means (32) for generating interception related information packets from a communication or network activity to be intercepted;

a second packet generating means (33) for generating communication content packets from said
15 communication or network activity to be intercepted;

an identification data generating means (34) for generating an identification data for said interception related information packets and said communication content packets associated to said
20 communication;

a ordering data generating means (35, 36) for providing ordering data for each of said interception related information data packets and/or each of said communication content packets; and

25 a transmitting means (37) for transmitting said interception related information packets and said communication content packets, said identification data and said ordering data to said interception authority device (1).

30

11. The system according to claim 10, wherein said interception authority device (1) comprises

a receiving means (11) for receiving said interception related information packets and said

communication content packets including said identification and said ordering data;

a identification means (12) for identifying interception related information packets and

5 communication content packets associated to said one communication; and

a packet ordering means (13, 14) for ordering said interception related information packets and/or said communication content packets according to said ordering
10 data.

12. The system according to claim 10, wherein said identification data is a session identification data.

15 13. The system according to claim 12, wherein said network is a GPRS network and said identification data generating means (34) of said first network element (3) further comprises a session identification data detection means for detecting said session identification data from
20 a PDP context.

14. The system according to claim 10, wherein said ordering data are integer order numbers and said ordering data generating means (35, 36) are adapted to increment
25 the order number for each sequential packet.

15. The system according to claim 10, wherein said first network element further comprises

a time stamp generating means (38) for providing a
30 time stamp to each interception related information packet and/or to each communication content packet.

16. The system according to claim 10, wherein said first network element comprises

a first frame generating means (32, 34) for providing a frame for each interception related information packet and for including said identification data in each frame, and

5 a second frame generating means (33, 34) for providing a frame for each communication content packet and for including said ordering data in each frame.

17. The system according to claim 16, wherein said first
10 network element further comprises

a time stamp generating means (38) for providing a time stamp to each interception related information packet and/or to each communication content packet, wherein

15 said time stamp generating means (38) is adapted to include said time stamp into each of said frames.

18. The system according to claim 10, further comprising an interception related information packets

20 delivering device (2_2) for delivering said interception related information packets from said first network element (3) to said interception authority device (1);

a communication content packets delivering device (2_3) for delivering said communication content packets
25 from said first network element (3) to said interception authority device (1); and

a packet delivering control device (2_1);

wherein said packet delivering control device (2_1) is adapted to identify said interception related

30 information packets and said communication content packets associated to said one group of communication packets on the basis of said identification data; and

to order said interception related information packets and said communication content packets on the
35 basis of said ordering data.

19. The system according to claim 10, wherein said ordering data are such that an overflow thereof is possible, and

5 said system further comprises a packet group distinguishing means for providing a packet group indication to each interception related information packet and/or to each communication content packet for distinguishing between the group of packets before said overflow and the group of packets after said overflow.